

REMARKS

Please reconsider the application in view of the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-6 are pending in this application. Claims 1, 2, and 5 are independent. The remaining claims depend, directly or indirectly, from claim 2 or claim 5.

Rejection(s) under 35 U.S.C. § 103

Claims 1-6 are rejected under 35 U.S.C. § 103(a) as being obvious over Japanese Patent Application Publication No. 05-265389 ("Saegusa") in view of Applicant's Admitted Prior Art ("AAPA"), and further in view of U.S. Patent No. 4,494,391 issued to Kikuta ("Kikuta"). For the reasons set forth below, this rejection is respectfully traversed.

One or more embodiments of the invention are directed to a first controller and a second controller for controlling corresponding electronic devices and a display driver. As seen with respect to Figure 1 of the Specification, a multiple control system 10 in accordance with one or more embodiments of the invention comprises, in part, a first controller (VCR microcomputer) 1, a second controller (DVD microcomputer) 2, a display driver 3, and a display unit 4 (*see, e.g.*, publication of the Specification, Figure 1, paragraph [0036]). Further, as seen with respect to Figure 1, a chip selection terminal, a serial output terminal, and a clock terminal of each of the first controller 1 and the second controller 2 are connected to a chip selection terminal, a serial output terminal, and a clock terminal, respectively, of the display driver (driver IC) 3 (*see, e.g.*, publication of the Specification, paragraph [0037]).

In one or more embodiments of the invention, when a VCR mode is selected, the VCR microcomputer 1 sends a VCR mode selection signal to the output selection terminal (D-SEL) of the DVD microcomputer 2. The DVD microcomputer 2 then puts its output terminals from DVD microcomputer 2 to the driver IC 3 in a high impedance state (*see, e.g.*, publication of the Specification, paragraphs [0041]-[0042]).

Accordingly, independent claims 1 and 2 require that when the first controller controls the display driver, the first controller outputs a first control signal to the second controller, and the second controller puts the three-state output terminal thereof in a high impedance state when the first control signal is received. Independent claim 5 requires that the first microcomputer and the second microcomputer are connected such that the second microcomputer receives a mode selection signal output from the first microcomputer, and when the first microcomputer determines that the recording and reproducing functional part is selected, the first microcomputer outputs the mode selection signal indicating that the recording and reproducing functional part is selected to the second microcomputer so as to put the three-state output terminal of the second microcomputer in a high impedance state, and outputs the display data to the display driver.

Saegusa, in contrast to the present invention, does not show or suggest at least the above limitations of the claimed invention. Saegusa fails to show or suggest at least that the first control signal for changing the state of the three-state output terminal of the second controller is output from the first controller. This fact is acknowledged by the Examiner (*see* Office Action dated August 24, 2006, at page 3). Accordingly, it would be clear to one skilled in the art that Saegusa fails to show or suggest at least the above limitations of the claimed invention.

With regard to AAPA and Kikuta, Applicant respectfully asserts that there is no motivation to combine the cited references. "To support the conclusion that the claimed

invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” See MPEP section 706.02(j) citing Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the inventor has done. However, as detailed below, Applicant respectfully asserts that the Examiner has not provided a convincing line of reasoning as to why the combination would have been obvious. Further, as detailed below, there is clearly no suggestion or motivation to combine the references within the prior art references themselves.

The Examiner states that Applicant admits that it is known to use three-state output terminals where three video signals feed the same output on pages 1-2 of the Specification, and the Examiner concludes that it would have been obvious at the time the invention was made to include a tri-state output in the multiple control system of Saegusa to allow the devices to be attached to a common device (*see* Office Action dated August 24, 2006, at page 4). The Examiner’s statement is incorrect. Applicant does not admit that it is known in the art to use three-state output terminals as asserted by the Examiner.

A thorough review of the background of the Specification shows that there is no discussion regarding three-state output terminals as asserted by the Examiner. The background of the Specification discusses a dual-deck DVD/VCR system having two microcomputers 11, 12. In contrast to the claimed invention, the first microcomputer 11 is connected to and controls a display element driver integrated circuit (IC) 13, and the second microcomputer 12 is connected to the first microcomputer 11 (*not* to the driver IC 13) (*see* Specification as published, Figure 4, paragraph [0004]). Thus, the second microcomputer 12 *indirectly* controls the driver

IC 13. The background (AAPA) clearly does not support the Examiner's position that it is known to use three-state output terminals.

Further, the Examiner states that Kikuta teaches to use a first display controller and a second display controller to drive a display device, and to put the output of the first controller at high impedance at the time the second controller is driving the display. The Examiner asserts that the combination of Saegusa and Kikuta would have been obvious to one of ordinary skill in the art to eliminate interference between the two display controllers (*see* Office Action dated August 24, 2006, at page 4). However, as detailed below, Applicant respectfully asserts that the Examiner's reasoning is incorrect.

Saegusa clearly states that reverse current preventing means, diodes D1 and D2, are provided between the control sections of Saegusa (*see* Saegusa, Figure 1, Abstract, and paragraph [0019] of English translation). Thus, one skilled in the art would not provide additional elimination of interference between display controllers as taught by Kikuta, since Saegusa already provides for the prevention of interference between the control sections. In other words, one skilled in the art would not be motivated by Saegusa or Kikuta to add additional unnecessary interference prevention (of Kikuta) between the control sections of Saegusa as asserted by the Examiner.

Further, Applicant respectfully asserts that there is no motivation to combine the references. As discussed above, AAPA provides no motivation to combine the references as asserted by the Examiner. Additionally, Saegusa already provides for the prevention of interference between the control sections. Further, Saegusa is completely silent with respect to three-state outputs, and thus provides no motivation to use three-state outputs. One skilled in the art would not be motivated by Saegusa, which is directed to controlling a liquid-crystal display in an electronic device, to incorporate the teachings of Kikuta, which is directed to display of

digital picture data from multiple sources (*see* Kikuta, abstract). Thus, there is no motivation to combine the cited references.

Even assuming, *arguendo*, that motivation to combine the cited references exists, Applicant respectfully asserts that Kikuta fails to show or suggest at least the above limitations of independent claims 1, 2, or 5. Further, Kikuta fails to show or suggest that which Saegusa lacks. The Examiner asserts that Kikuta teaches the use of three-state output terminals for use where three video signals feed the same output (*see* Office Action dated November 17, 2005, at page 4). However, it would be clear to one skilled in the art that Kikuta teaches that display controller 36C, which is part of display part 36 and not part of the purported first display controller 10 or second display controller 40, stops the display function and puts the synchronous output (of the display part 36) at high impedance when the auxiliary information processor 10 is docked with the extended information processor 40 (*see* Kikuta, Figure 5, col. 3, lines 39-50). In other words, when the purported first display controller 10 and second display controller 40 are in communication, the display part 36 outputs a high-impedance state. It would be clear that Kikuta does not show or suggest a first controller outputting a control signal to a second controller to control the second controller. Thus, Kikuta fails to show or suggest at least a first controller outputting a first control signal to a second controller, and the second controller putting the three-state output terminal thereof in a high impedance state when the first control signal is received, as required by the claimed invention.

In view of the above, Saegusa, AAPA, and Kikuta, (i) whether taken separately or in combination, fail to show or suggest the invention as recited in independent claims 1, 2, or 5, and (ii) are not properly combinable. Thus, independent claims 1, 2, and 5 are patentable over Saegusa, AAPA, and Kikuta. Claims 3 and 4, directly or indirectly dependent from claim 2, are

allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 04995/105001).

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Respectfully submitted,

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